What is claimed is:

1. An information processing system comprising:

a server computer system which holds pieces of data as processing objects and characteristic values calculated on the basis of the pieces of data while associating the pieces of data with the characteristic values respectively, accepts a characteristic value as information requesting a piece of data as a processing object from a requester and selects the piece of data associated with the accepted characteristic value from the held pieces of data so as to provide the piece of data to the requester; and

a client-side computer system which is communicatably connected to the server computer system and acquires pieces of data as processing objects from the server computer system.

2. A computer system comprising:

a holding unit for holding pieces of data as processing objects and characteristic values calculated on the basis of the pieces of data while associating the pieces of data with the characteristic values respectively; and

a providing unit for accepting a characteristic value as information requesting a piece of data as a processing object from a requester and selecting the piece of data associated with the accepted characteristic value from the pieces of data held by the holding unit so as to provide the piece of data to the requester.

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3.   A computer system according to Claim 2, further comprising an operation unit for calculating a characteristic value on the basis of a piece of data as a processing object, wherein the operation unit divides the piece of data as a processing object into a sequence of data fragments each having a predetermined size, calculates characteristic values based on the data fragments in accordance with the data fragments respectively, holds the data fragments and the characteristic values in the holding unit while associating the data fragments with the characteristic values respectively, generates a sequence of characteristic values corresponding to the sequence of data fragments, calculates a characteristic value based on the sequence of characteristic values, and holds the sequence of characteristic values and the characteristic value calculated based on the sequence of characteristic values in the holding unit while associating the sequence of characteristic values with the characteristic value calculated based on the sequence of characteristic values.

4.   A computer system according to Claim 3, wherein the operation unit calculates the characteristic value based on the sequence of characteristic values by a repetitive operation for respective characteristic values contained in the sequence of characteristic values at the time of calculation of the characteristic value based on the sequence of characteristic values; and

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when the sequence of characteristic values comprises N characteristic values, the operation unit holds a result of the repetitive operation for one to N-1 characteristic values in the holding unit.

5   5.   A computer system according to Claim 2, further comprising an operation unit for calculating a characteristic value on the basis of a piece of data as a processing object, wherein the operation unit divides the piece of data as a processing object into a sequence of data fragments each having

10   a predetermined size, calculates characteristic values based on the data fragments in accordance with the data fragments respectively, compares the size of each calculated characteristic value with the predetermined size, holds the data fragment per se in the holding unit when the predetermined size

15   is smaller than the size of the calculated characteristic value but holds the data fragment and the characteristic value associatively in the holding unit when the predetermined size is larger than the size of the calculated characteristic value, generates a characteristic value-containing sequence

20   corresponding to the sequence of data fragments, calculates a characteristic value based on the characteristic value-containing sequence, and holds the characteristic value-containing sequence and the characteristic value calculated based on the characteristic value-containing

25   sequence in the holding unit while associating the

characteristic value-containing sequence with the characteristic value calculated based on the characteristic value-containing sequence.

6. A computer system according to Claim 2, wherein the holding unit holds a characteristic value calculated on the basis of a characteristic value set containing at least one characteristic value; and

the providing unit provides respective characteristic values contained in a characteristic value set to the requester when a characteristic value accepted as information requesting a piece of data as a processing object is associated with the characteristic value set.

7. A computer system according to Claim 2, wherein the holding unit holds information for specifying a characteristic value calculation method in association with the characteristic value.

8. A computer system according to Claim 2, wherein the holding unit holds the characteristic value containing information concerning a predetermined calculation state at a point of time of calculation of the characteristic value.

9. An information processing method, comprising the steps of:

holding pieces of data as processing objects and characteristic values calculated on the basis of the pieces of data while associating the pieces of data with the characteristic

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values respectively; and

accepting a characteristic value as information requesting a piece of data as a processing object from a requester and selecting the piece of data associated with the accepted characteristic value from the held pieces of data so as to provide the piece of data to the requester.

10. A program executed by a computer system, comprising:

a procedure for holding pieces of data as processing objects and characteristic values calculated on the basis of the pieces of data while associating the pieces of data with the characteristic values respectively; and

a procedure for accepting a characteristic value as information requesting a piece of data as a processing object from a requester and selecting the piece of data associated with the accepted characteristic value from the held pieces of data so as to provide the piece of data to the requester.